

LEBEDEV, O.P.; FRANTSUZOVA, T.A.; KUDELIN, V.N.

Determination of magnetite in iron cherts. Zav. lab. 31 no.9:1069-1070
'65. (MIRA 18:10)

1. Krivorozhskiy nauchno-issledovatel'skiy gornorudnyy institut i
Severnnyy gornoobogatitel'nyy kombinat.

KUKHTIKOVA, T.I.; FRANTSUZOVA, V.I.; YEFERINA, G.P.; ABRAMOVICH, I.B.;
PAVLOVA, G.I.

Prevailing periods of surface waves. Dokl. AN Tadzh, SSR 6
no.3:17-21 '63. (MIRA 17:4)

1. Institut seysmostoykogo stroitel'stva i seysmologii AN
Tadzhikskoy SSR. Predstavleno chlenom-korrespondentom AN
Tadzhikskoy SSR R.B.Baratovym.

AL(1)/L(1) 145 GW
ACCESSION NO. AR5013959

IR/0169/65/000/004/0017/0017
150.341

AUTHOR: Kukhtikova, T.I.; Frantsuzova, V.I.

TITLE: Correspondence between predominant periods and surface-wave spectra B

SOURCE: Ref. zh. Geofizika, Abs. 4097

CITED SOURCE: Tr. In-t seysmostoyk. str-va i seysmol. AN TadzhSSR, v. 12, 1964, 84-96

TOPIC TAGS: seismic wave, surface wave, predominant period, seismic wave spectrum, surface wave spectrum

ABSTRACT: Visually determined approximate characteristics of surface waves were compared with their true spectra. Observations made by Kulyab and Knorog seismic stations for epicentral distances ranging from 1,200 to 2,000 km were used. Equipment distortions in the determination of true spectra were eliminated. Complex spectra were smoothed. Visually determined spectral characteristics of the true spectral maxima are only approximate and do not reflect their peculiarities. The approximate spectra of surface waves are narrower and are situated in the region

Cord 1/2

11-100-11
ACCESSION NR: AR5013959

of the principal maximum of the true spectrum, closer to its short-period section. The long-period constituents, not recorded visually, are well represented in the true spectra. As determined by seismograms, the predominant periods and the periods of maximum amplitudes lie in the vicinity of principal maxima of the spectra. However, sometimes it is the maximum-amplitude periods, and sometimes the predominant periods, which are closest to the maximum. L. Bakasina

ENCL. 00

STG. 1/1/8

Cord 2/2

SESSION NR: AR5008607

the parameters of seismic apparatus. These data are available for computation of the dynamic characteristics of the frequencies. It is extremely irrational for the computation of the parameters to be left to each interpreter. It is proposed that the parameters of the seismic apparatus be determined by the manufacturer.

SUB CODE: ES

ENCL: 00

Card 2/2

FRANTSUZOVA, Z.M.

Conditioned and unconditioned responses in poliomyelitis. Vop. okh.
mat. i det. 1 no.1:30-32 Ja-F '56. (MIRA 9:9)

1. Iz kliniki nervnykh bolezney Nauchno-issledovatel'skogo pediatri-
cheskogo instituta (dir.-prof. A.L.Libov)
(POLIOMYELITIS) (CONDITIONED RESPONSE) (REFLEXES)

FRAN SUZOVA, Z. M.

FRANTSUZAVA, Z.M. ⁰Can Med Sci -- (diss) "Conditional ^{ad} and ^{unconditional} Absolute
Reflexes in Poliomyelitis in Children". Len, 1957, 10 ^{pp} ~~pages~~.
^{Acad Sci USSR} (Ac. Sc. USSR. Inst of Physiology im Academician I.P. Pavlov).
100 copies (KL, 10-58, 122).

- 50 -

FRANULOVIC, Kuzma, inz.

Quality of the gravel of the Sava River for the making of beton
in the Zagreb area. Gradevinar 14 no.3:75-79 Mr '62.

1. Institut za gradevinarstvo NRH.

FRANULOVIC, Kuzma, inz.

Some methods for the testing of plastics used in building. Gradevinar
14 no.10;351-356 0 '62.

1. Institut za gradevinarstvo NRH, Zagreb.

FRANTIS, K.K., kapitan 1-go ranga

The past and the future of aircraft carriers. Mor. abor. 48
no.4:46-54 Ap '65. (MIRA 18:6)

HUNGARY

BARANKAY, Bertalan, Dr., FRANTZEL, Marianne, Dr., LUDANY, Gyorgy, Dr., and VAJDA, Gyula, Dr., Second Surgical Clinic at the Medical University (Orvostudományi Egyetem, II. sz. Sebészeti Klinika) (Director: MESTER, Endre, Dr.); and Hospital of the Hungarian National Railways (Magyar Államvasutak Korház) Laboratory (Laboratorium) (Physician-in-Chief: GORECZKY, László, Dr.) in Budapest.

"Effect of Intravenously Injected Glucocorticoids on the Leukocyte Phagocytosis of Bacteria"

Budapest, Orvosi Hetilap, Vol 107, No 24, 12 Jun 1966, pp 1107-1109.

Abstract: Water-soluble glucocorticoids capable of being administered intravenously (Di-Adreson-F-Aquosum, Urbason, and Oradexon), when given in the generally employed therapeutic range, first decrease and then increase the leukocyte phagocytosis of bacteria. The diphasic effect involves the resistance of the organism against infection also: this fact is of significance to the clinician. The phenomenon is attributable probably to the cell metabolism effect rather than to changes in the segmentation of the granulocytes. 13 references, including 3 Hungarian, 2 German, and 10 Western.

1/1

- 35 -

FRANULOVIC P.

Orthopedic corset. Acta chir. iugosl. 2 no.4:320-325 1955.

1. Kirursko odeljenje Oblasne vojne bolnice u Zagrebu

(Nacelnik: puk. dr. Franz Kleinhappel)

(ORTHOPEDICS, appar. & instruments

corsets, anat. aspects & indic. (Ser))

FRANULOVIC, P.; RIBKIN, K.

Osteogenesis imperfecta; case reports. Acta chir. iugosl.
3 no.2:146-152 1956.

1. Kirursko odjeljenje Vojne bolnice u Zagrebu (nac. puk. dr.
Franz Kleinhoppel).

(OSTEOGENESIS IMPERFECTA, case reports
(Ser))

FRANUS, Edward (Krakow)

Problem of fear reaction factors in little children during
their contact with animals. Przegl psychol no. 6:150-173
'63.

ACCESSION NR: AP4032506

8/0080/64/037/004/0911/0914

AUTHOR: Frayman, R. S.

TITLE: Design of reactors for the synthesis of methylchlorosilanes, taking into account the kinetic factors.

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 4, 1964, 911-914

TOPIC TAGS: methylchlorosilane, synthesis, reaction rate

ABSTRACT: The principal parameter which characterizes the intensity of operation of the reactor for synthesis of methylchlorosilanes (I) is their yield per 1 kg of contact mass per hour. Using this quantity one determines the magnitude of the charge for a given capacity reactor, which is determined to a significant extent by the geometrical dimensions of the apparatus. A significant effect on the yield of methylchlorosilanes in addition to the quality of contact mass and methyl chloride is displayed by the temperature, pressure and the time of retention of methyl chloride in the reaction zone. This article establishes the mathematical relationship of the indicated kinetic factors and their effect on the yield of (I). The obtained relationship has the form:

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ACCESSION NR: AP4032506

$$g = \frac{A}{\beta_0} \cdot \frac{1 - e^{-\beta_0 t}}{t}$$

where g is the yield of (I); A is a composite constant ($A = 3600/\gamma \cdot v$, where γ is the density of delivered contact mass in kg/m^3 and v is specific volume of methyl chloride under parameters of synthesis); β_0 is the specific consumption of methyl chloride in the reactor; t is an arbitrarily selected time of retention of methyl chloride in the reaction zone (sec). Using this formula the calculated yield is in good agreement with the experimental results in a 200 mm reactor, for which the yield is 120 - 130 g/kg·hr, while the calculated amount is 130 g/kg·hr. Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 15Mar62

ENCL: 00

SUB CODE: OC

NO REF SOV: 001

OTHER: 001

Card 2/2

FRANYO, Istvan; POLLAK, Laszlo

Frame antenna instead of ferrite antenna. Radiotechnika 12 no.12:
429 D '62.

FRANYO, Istvan; POLAK, László

Why is an aerial antenna better? Radiotechnika 13 no.4:
159 Ap '63.

Dissemination: "An Investigation of the Effect of the Pattern of the Surface
Magnetic and Mechanical Properties." Card. 1st-14th. Vol., 1st-14th. of Lenin
State University N. V. Losonov, 23 Jan 54. (Techernyaya Radio, Moscow, 14 Jan 54,

SO: 100 312, 23 Dec. 1954

FRANK, V. A.

24(0) PHASE I BOOK EXPIRATION: 30V/3371

Minsk, Belorusskiy politicheskii institut

Sbornik nauchnykh rabot. Vyp. 60: Seriya fiziko-matematicheskaya (Collected Scientific Works. Nr 60: Physics and Mathematics Series) Minsk, 1957. 167. Errata slip inserted. 1,000 copies printed.

Sponsoring Agency: Ministerstvo vysshego obrazovaniya SSSR.

Tech. Ed.: S. Kh. Pasina; Editorial Board: N. A. Besonov, Docent, Candidate of Physical and Mathematical Sciences (Minsk); V. A. Frank, Docent, Candidate of Physical and Mathematical Sciences (Minsk); M. V. Abramov, Docent, Candidate of Physical and Mathematical Sciences; and L. I. Chasnikov, Docent, Candidate of Physical and Mathematical Sciences (Resp. Ed. for this Number).

PURPOSE: This book is intended for students of the physical and mathematical sciences.

COVERAGE: This is a collection of 19 articles on mathematics, physics, and theoretical mechanics, prepared by members of the Belorusskiy politicheskii institut imeni I. V. Stalin (Belorussian Polytechnic Institute imeni I. V. Stalin) in Minsk. The articles are written by leading scientists in the field of physics and mathematics. The collection includes a variety of topics, including the theory of vibrations, the theory of the run-off of spring floods, the experimental study of the electroerosion process, crystallization from melts, abrasive polishing of crystals, stress distribution in the frame of an automobile, and the elastic properties of a body during its plastic deformation. References follow the individual articles.

8. Kivshin, I. M. and M. A. Turchanovich. Simplifying the Technique of Approximate Calculation of Definite Integrals by Formulas of Numerical Quadratures 56
9. Eshman, V. B. Diagram for the Formula of G. M. Alekseyev for Calculating the Maximum Run-off of Spring Floods 69
10. Aranas'yan, M. V., A. M. Dashkevich, and A. K. Shukavich. On the Efficiency of the Electroerosion Process 73
11. Abramov, M. V., M. B. Rubevich, and V. A. Frank. About the Dispersal Phase of Metal During High-Voltage Spark Discharge in a Gaseous Medium 82
12. Chasnikov, L. I. Effect of an Electric Field on the Formation of Crystallization Centers in Supercooled Melt 98
13. Chasnikov, L. I. Temperature Versus Activation Energy of Supercooled Molecules of Salt and Metal Melts 106
14. Besonov, M. A. Relationship Between the Work, Heat, and Absorbed Energy in the Abrasive Wear of Rock Salt Crystals 116
15. Alekseyev, G. M., and V. A. Besonov. Effect of Surface Energy on the Abrasive Wear of Crystals 125
16. Opejko, P. A., Corresponding Member, AS SSSR, Professor, Doctor of Technical Sciences. Reducing Equations of Plane Motion to Homogeneous Equations and Proving the Theorem of the Minimum Sum of Moments of Force Acting on a Plate Lying on a Rough Plane 131
17. Opejko, P. A., Corresponding Member, AS SSSR, Professor, Doctor of Technical Sciences. On the Minimum Sum of Moments of Force Acting on a Caterpillar Tractor in a Static State of Turning 138
18. Bristun, A. M. Investigation of Stresses in the Frame of a MZ-585 Automobile 141
19. Kishporovich, P. V. Studying the Elastic Behavior of a Body During Plastic Deformation 147.4

AKULOV, N.S.; FRANYUK, V.A.

Changes in some physical properties of metals during fatigue.
Dokl.AN BSSR 3 no.3:87-90 Mr '59. (MIRA 12:8)
(Metals--Fatigue)

ARULOV, N.S.; FRANYUK, V.A.

Statistical theory of the fatigue disintegration of metals. Dokl. AN
BSSR 3 no.8:331-335 Ag '59. (MIRA 12:11)
(Metals--Fatigue)

AKULOV, N.S.; FRANYUK, V.A.

Physical principles of the fatigue of metals. Dokl.AN
BSSR 4 no.2:62-65 F '60. (MIRA 13:6)
(Metals--Fatigue)

S/170/60/003/012/014/015
B019/B056

AUTHORS: Yerofeyev, B. V., Academician of the AS BSSR, Treyer, V. N.,
Corresponding Member of the AS BSS, ~~Franyuk, V. A.~~
Candidate of Physical and Mathematical Sciences

TITLE: Nikolay Sergeyevich Akulov (On the Occasion of His 60th
Birthday)

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 12,
pp. 119-122

TEXT: On September 12, 1960, Academician of the AS BSSR, Professor
N. S. Akulov was 60. He looks back upon a 35 years' activity as head of
the Laboratory of Problems of Physics of the FTI AS BSSR. Akulov finished
high school in 1919, 1920 he joined the Red Army, and, after having been
demobilized in 1921, he began to study at the khimicheskiy fakul'tet
Kubanskogo politekhnicheskogo institut (Chemical Department of the Kuban
Polytechnic Institute). From 1922 onward he studied at the fiziko-
matematicheskiy fakul'tet (Department of Physics and Mathematics) at
Moscow. Under the guidance of Professor M. A. Izgaryshev he studied the

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Nikolay Sergeyevich Akulov (On the Occasion
of His 60th Birthday)

S/170/60/003/012/014/015
B019/B056

properties of aerosols and, after graduation, he became Aspirant at the Laboratory of Professor V. K. Arkad'yev. In 1928 he formulated the anisotropy law for ferromagnetic bodies, which is named after him. After having become a docent, he worked in the capacity at the Kafedra fiziki Gor'kovskogo gosudarstvennogo universiteta (Chair of Physics of Gor'kiy State University), where he set up the laboratory of magnetism and established the first Chair of Magnetism in the Soviet Union. Under his supervision, a large number of experts on magnetism were trained (Ye. I. Kondorskiy, N. L. Bryukhatov, K. P. Belov, G. P. D'yakov, D. I. Volkov et al.). In 1940 he was elected Member of the Academy of Sciences of the Belorusskaya SSR and also Secretary of the technical branch of the Academy. He was awarded the Order of the Red Banner of Labor and the Prize imeni M. V. Lomonosov. Among other things, he was also concerned with the physics of combustion processes and the strength of metals. This work was carried out in collaboration with the Fiziko-tekhnicheskiy institut AN BSSR (Institute of Physics and Technology of the AS BSSR). Together with Kunavina, Akimov, Sol'chev and others, he developed a vibration-defectoscope, which is widely in use. There is 1 figure. ✓

Card 2/2

S/058/51/000/010/072/100
AC01/A101

24.7/100

AUTHORS: Akulov, N.S., Franyuk, V.A.

TITLE: Fatigue destruction of crystals

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 242, abstract 10E85
("Izv. AN BSSR. Ser. fiz.-tekhn. n.", 1961, no. 1, 42 - 46)

TEXT: The authors consider theoretically the effect of great oscillation amplitudes, exceeding the limit of crystal fatigue. It is possible that fixed dislocations are collapsed with formation in their stead of microcracks. Experimental relations are presented which connect the magnitude of applied external stresses with number of cycles at which microcracks arise, as well as changes of microhardness and magnetic induction with number of cycles. There is a good agreement between the form of the indicated relations and theoretical predictions. ✓B

V. Rozenberg

[Abstracter's notes: Complete translation]

Card 1/1

1.1110

26.2310

S/139/61/000/001/014/018
E073/E535

AUTHORS: Afanas'yev, N. V., Rzhevskiy, M.B. and Franyuk, V.A.

TITLE: On the Mechanism of Electric Erosion

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika,
1961, No.1, pp.138-142 + 2 plates

TEXT: The results are described of investigations of the product of electric erosion in the case of a high voltage spark discharge in a gaseous medium. Most authors hold the view that electric erosion of metals is caused by thermal effects on the electrodes. However, divergent views have been expressed on the mechanism of removal of material from the electrodes. B. R. and N. I. Lazarenko (Ref.1) assume that the section of the anode hit by the current surge melts away and is torn off the electrode as a result of the dynamic forces. However, E. Williams (Ref.2) considers that an electric field of a high potential which occurs in the erosion gap acts on the positive ions of the crystal lattice and tears away small quantities of metal. B. N. Zolotikh (Ref.3) considers that electric erosion is mainly due to the liquid phase and that evaporation is of secondary importance. S.L.Mandel'shtam and S. M. Rayskiy (Ref.4) attribute the electric erosion to the

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89706

On the Mechanism of Electric Erosion

S/139/61/000/001/014/018
E073/E535

mechanical destruction of opposing electrodes by the streams of metal vapour which occur as a result of explosive evaporation of the electrode material during the discharge. The authors of this paper investigated the products of electric erosion obtained by means of a high voltage spark discharge in air between electrodes of various metals. The experiments were made with a test-rig shown in Fig.1, in which a bank of condensers 4 of $C = 2.4 \mu F$ was connected parallel to the spark gap. The voltage fed to the electrodes was 7000 V. A glass plate 5 was placed below the electrodes on which deposits were collected which formed during the spark discharge; after appropriate sparking, the glass plates, containing the erosion product deposits, were photographed and some of the thus obtained photographs are reproduced in the paper. As electrodes the following materials were used: tungsten, nickel, copper, armco iron, aluminium, lead, bismuth, Wood alloy. The obtained photographs indicate that, during the discharge, metal vapours form which condense on the surface of the glass and also a liquid phase which precipitates in the form of spheres of various sizes. The process of electric erosion begins with an intensive

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89706

On the Mechanism of Electric Erosion

S/139/61/000/001/014/018
EO73/E535

evaporation of the electrode material, as a result of which two flows of particles form which meet in the inter-electrode gap. As a result of collision of the particles, flows become compressed, forming deposits on the glass which have an elliptical shape. The sharply defined boundaries between the individual zones observed on the photographs are attributed to the oscillatory nature of the discharge which was established by means of an oscillograph; clear boundaries of areas with different densities may have formed as a result of precipitation of vapours from the electrodes during the first, second and third half-wave of the current flow. Absence of vapours in the centre zone was observed on plates which were located very near to the discharge axis and this is attributed to the fact that in this zone the glass plate was heated to a temperature which was higher than the condensation temperature of the vapours. The subsequent zone was formed as a result of super-position of several flows of vapour particles during the first, second and third current half-waves and in this zone no trails of movement of spheres can be seen. In the subsequent zone, these traces can be clearly seen since the vapours condense on dropping into the lower temperature area condensing and forming small spheres which drop onto the plate

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On the Mechanism of Electric Erosion

S/139/61/000/001/014/018
E073/E535

and slide along the vapour layer deposited on it, leaving behind trails of its movement. Spheres of this type could form only after the first half-wave when the electrodes already had small craters caused by evaporation of the metal. The surface layer of such craters will still have a high temperature during the subsequent current half-wave when its temperature rises still further, evaporating a part of the metal and, due to the pressures in the spark gap, a part of the liquid phase will be squeezed out in the form of spheres of various diameters which scatter in all directions; therefore, these spheres and their traces can be detected in all the areas of the deposits on the glass plates. Due to the presence of spheres of this latter type, the views of Williams and Zolotykh that removal of the solid or liquid phase from the electrode is caused by the electrostatic forces seem to be incorrect. If they were true the particles would move approximately along lines of force of the field and in this case they would deposit only on the opposite electrodes; in reality, however, the trajectories of the particles form a large scattering angle relative to the discharge axis which may reach 80 to 90°. The views of Mandel'shtam and Rayskiy, who assume that the destruction of the electrodes occurs

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S/139/61/000/001/014/018

On the Mechanism of Electric Erosion E073/E535

due to the effect of the jets emanating from the opposing electrodes, are also unacceptable, since the obtained photographs of the erosion product deposits show that the flow of particles from the electrodes do not penetrate into each other but, on the contrary, they repulse each other. The results indicate that, during a discharge, electrode material is removed, not only in the gaseous but also in the liquid phase. The following conclusions are arrived at: 1) In the case of a condensed high voltage spark discharge in a gaseous medium, the flow of particles emanating from the electrodes represents a two-phase system containing a liquid and a gaseous phase. This applies to low melting point as well as to high melting point metals. 2) The intensity of the flow of particles emanating from the electrodes during the discharge depends on the material of the electrodes; from low melting point metals the intensity of flow is larger than for high melting point metals. 3) Evaporation of the metal from the electrodes takes place throughout the entire time of the discharge. Abandoning the electrodes in the gaseous phase the metal condenses and scatters in the surrounding medium in the form of fine spheres.

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Card 5/6

89706

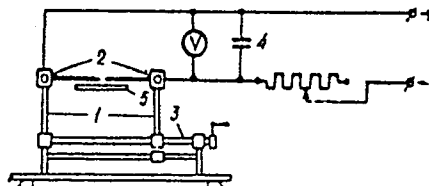
On the Mechanism of Electric Erosion S/139/61/000/001/014/018
E073/E535

4) In the liquid phase the metal is removed from the electrodes after the first or the second current half-wave. Removal of the liquid phase does not occur as a result of tearing out of the metal but as a result of the high pressures pertaining in the discharge canal. 5) The vapour streams emanating from the electrodes cannot produce mechanical destruction of the counter electrode since they meet in the gap centre and compress each other. 6) Electric erosion products of metals contain spheres which form as a result of condensation of metal vapours and spheres which form as a result of being squeezed out from the liquid phase of the craters. There are 8 figures and 4 references: 3 Soviet and 1 non-Soviet.

ASSOCIATION: Belorusskiy politekhnicheskii institut imeni I.V. Stalina (Belorussian Polytechnical Institute imeni I. V. Stalin)

SUBMITTED: September 24, 1959

Fig.1



Card 6/6

S/137/62/000/004/104/201
A052/A101

AUTHOR: Franyuk, V. A.

TITLE: The effect of alternate stresses on magnetic and mechanical properties of metals

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 34, abstract 41194
("Vestsi AN BSSR. Ser. fiz.-tekhn. n.", no. 2, 1961, 122-126;
Belorussian; - Russian summary)

TEXT: The magnetic permeability and microhardness of Fe affected by alternate stresses with an amplitude exceeding σ_w change non-monotonously. An increase of microhardness corresponds to the decrease of permeability and vice versa. The failure of samples took place after the 4th extremum on the magnetic permeability curve as a function of the number of cycles, which made it possible to divide the process of fatigue into several stages. An application of an intermediate annealing in different stages permitted the selection of favorable conditions for increasing the fatigue strength of Fe.

IT. Rumyantseva

[Abstracter's note: Complete translation]

Card 1/1

FRANYUK, V.A.

Changes in the magnetic properties of ferromagnetic metals during creep.
Issl. po zharoproch. splav. 10:110-112 '63. (MIRA 17:2)

ACCESSION NO: AP4014697

S/0250/64/008/001/0033/0035

AUTHOR: Franyuk, V. A.

TITLE: Progress of the approach to the halting of creep (delivered by N. S. Akulov, academician of AN BSSR)

SOURCE: AN BSSR. Doklady*, v. 8, no. 1, 33-35

TOPIC TAGS: creep deformation, creep rate, creep limit, dislocation, magnetization measurement, electrolytic nickel

ABSTRACT: Tubular samples of electrolytic nickel were subjected to a constant torque. The rate of creep deformation was found to decrease exponentially with time, verifying earlier results on copper wire. Simultaneous measurements of the sample magnetization were made in a field of 0.5 oersted with an astatic magnetometer. The rate of magnetization increase was also found to decrease exponentially with time. A theoretical discussion indicates that dislocations in the sample (caused by the deformation) result in the redistribution of magnetic domains. With an applied external magnetic field, the reorientation of domains proceeds preferentially in the direction of the field, resulting in increased magnetization. Hence, the rate of magnetization increase should be related to the

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ACCESSION NO: AP4014697

creep deformation rate, as is indicated experimentally. Orig. art. has: 6 equations and 2 diagrams.

ASSOCIATION: Fiziko-tehnicheskii institut AN BSSR (Institute of Physics and Technology, AN BSSR)

SUBMITTED: 22Mar63

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: MA, PH

NO REF SOV: 001

OTHER: 000

Card 2/2

ACCESSION NR: AP4039328

S/0250/64/008/004/0228/0230

AUTHOR: Franyuk, V. A. (presented by N. S. Akulov, Academician AN BSSR)

TITLE: Influence of a magnetic field on the creep of polycrystalline nickel

SOURCE: AN BSSR. Doklady*, v. 8, no. 4, 1964, 228-230

TOPIC TAGS: creep, nickel, magnetic field effect, creep deformation, creep velocity

ABSTRACT: The effect of a magnetic field on creep deformation was investigated experimentally. Creep deformation was produced by twisting a nickel tube (o.d.-4.2 mm, wall thickness-0.5 mm) at a constant shearing stress. Typical results are shown on Fig. 1 on the Enclosure, where α on the ordinate axis is proportional to the shear deformation. At $t = 0$ the constant load was applied without a magnetic field. At point A, when the velocity of creep deformation had become insignificant, a constant magnetic field $H = 20$ oersteds was applied to the sample. At point B the constant field was replaced by a variable field with an amplitude of 20 oersteds. Some time after the application of the constant field, (when the creep velocity was approximately equal to that before the application of the field), the field was turned off. No noticeable change in creep velocity was observed.

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ACCESSION NR: AP4039328

It was also found that the total increase of deformation was directly proportional to the square of the magnetization. Orig. art. has: 3 equations and 2 diagrams.

ASSOCIATION: Fiziko-tehnicheskii Institut AN BSSR (Physicotechnical Institut AN BSSR)

SUBMITTED: 24May63

DATE ACQ: 09Jun64

ENCL: 01

SUB CODE: MM

NO REF SOV: 003

OTHER: 003

Card 2/3

GALENKO, P.P.; FRANYUK, V.A.

Statistical theory of the akulov dislocation. Fiz. met. i
metalloved. 15 no.5:773-778 My '63. (MIRA 16:8)

1. Laboratoriya fizicheskikh problem Fiziko-tekhnicheskogo
instituta AN BSSR.

(Dislocations in metals)

FRANYUK, V.A.

Effect of a magnetic field on creep of polycrystalline nickel.
Dokl. AN BSSR 8 no.4:228-230 Ap '64. (MIRA 17:6)

1. Fiziko-tekh izhoshkiy institut AN BSSR. Predstavleno akademikom
AN BSSR N.S. Akulovym.

ACC NR: AP7000157

SOURCE CODE: UR/0250/66/010/011/0856/0858

AUTHOR: Franyuk, V. A.

ORG: Department of the Physics of Nondestructive Testing, AN BSSR (Otdel fiziki nerazrushayushchego kontrolya AN BSSR)

TITLE: The change in shear modulus of deformed nickel in a magnetic field

SOURCE: AN BSSR. Doklady, v. 10, no. 11, 1966, 856-858

TOPIC TAGS: nickel, ferromagnetic material, shear strength, shear modulus, domain structure, dislocation effect, magnetostriction

ABSTRACT: Shear modulus changes were studied in deformed nickel under a simultaneous magnetic field (ΔG effect). Nickel tubes having an external diameter of 4.2 mm and a length of 50 mm were deformed in torsion. After a given torsion load was applied, an external magnetic field was superimposed on the specimen and the change in torsion angle was recorded. Simultaneous measurements of linear magnetostriction were made by a mechano-optical lever. Shear modulus changes were obtained using both high frequency (a few thousand cps) and low frequency (a few cps) oscillations. The relative change in shear modulus was given as a function of applied external field for tangential stresses of 0.34, 0.7, 1.01, and 1.35 kg/mm². At every level of stress a minimum occurred at 100 oersted, while above 200 oersted the relative change in shear modulus in-

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ACC NR: AP7000157

creased linearly. These changes were caused by changes in domain distribution. Shifts of 180° and 90° affect the ΔG effect differently. In the case of a 180° shift there is no change in the dimensions of a body, with the exception of a magnetostrictive effect within the domain boundaries. The interaction energy of edge dislocations parallel to a 180° wall was proportional to the magnetostrictive constant, the shear modulus, the Burger's vector, and the boundary thickness. In the case of a 90° shift a change in the volume magnetoelastic energy occurs, resulting in a change of body dimensions (magnetostrictive effect). The relative changes in shear modulus at low fields was attributed to 90° shifts of domains. At higher fields their contributions were diminished, decreasing the rise in relative shear modulus. The change of maximum increment of deformation, caused by magnetization, for different values of shear stress rose sharply at first and then became linear. This was caused by 90° domain shifts interacting with mobile dislocations in a stressed ferromagnetic. Presented by Academician AN BSSR, N. S. Akudov. Orig. art. has: 2 figures, 1 formula.

SUB CODE: 11,20/

SUBM DATE: 10Jun66/

ORIG REF: 004/

OTH REF: 004

Card 2/2

FRANZ, Ferdinand

Korose kovu a jejich ochrana. 1./dil/. Zakladni poznatky. (Corrosion of Metals and Their Protection. Vol. 1. Principles; a university textbook. 1st ed. illus.) For the students of the Faculty of Inorganic Technology, Department of the Chemical Technology of Metals. Prague, SNTL, 1957, 124 p.

Bibliograficky katalog, CSR, Ceske knihy, No. 33. 24 Sept 57. p. 724.

Distr: 4E2c

18 27
/ The electrolytic deposition of tin from aqueous salt solutions formed in the refining of lead by the Harris process. Ferdinand Braun and Miloslav Jirka (Vysoká škola chem. technol., Prague). Sborník vysoké školy chem. technol. v Praze 1957, 23-33. — Attempts were made to obtain Sn by electrolyses of solns. made by dissolving the by-product in the Harris refining process for Pb. Cathodic current yield increased with increasing concn. of Sn and decreased with higher c.d. and increasing concn. of NaOH. Increasing c.d. increased the rate of Sn deposition. To make perfect use of time and current, higher c.d.s. are recommended for higher Sn concns. and lower c.d.s. are recommended for lower Sn concns.

M. Hudický

FRANZ, Ferdinand; VALENTA, Boris

Hydrogen brittleness of cadmium plated springs. Sbor chem tech no.3,
part 1:209-225 '59.

1. Katedra anorganické technologie, Vysoká škola chemicko-technolo-
gická, Praha.

KRALICEK, Ladislav [deceased]; FRANZ, Ferdinand; QUADRAT, Otakar st.

Study of reactions between oxides and sulfides of metals used in metallurgy. Sbor chem tech 4 no.2:141-157 '60.

(EEAI 10:9/10)

1. Katedra chemické technologie kovů, Vysoká škola chemicko-technologická, Praha.

(Metals) (Oxides) (Sulfides)

BURDA, Pavel; BRETT, Zdenek; FRANZ, Ferdinand

The mass transfer in liquid metal systems with thermal gradient.
Sbor chem tech 4 no.2:159-170 '60. (EEAI 10:9/10)

1. Katedra chemické technologie kovů, Vysoká škola chemicko-techno-
logická, Praha.

(Metals)

DIMITROV, D.I.; FRATEV, F.D.

Oxidation of aromatic hydrocarbons with the aid of
potassium permanganate. Pt.4. Godishnik khim tekhn 9 no.2:
133-144 '62 [publ. '63].

DEMITROV, D.; FRATEV, F.; STLFANOVA, A.; BRATKOVA, M.

Some color reactions of aromatic compounds. Pt.4. Godishnik
khim tekhn 9 no.2:209-219 '62 [publ. '63].

FRANZ, F.; SANDERA, I.

Corrosion of the iron-zinc system. Strojirenstvi 13 no.11:
844-846 N '63.

1. Katedra chemické technologie kovů, Vysoká škola chemickotechnologická, Praha.

DIMITROV, D.; FRATEV, F.

New type of complex products of donor-acceptor interaction
between aromatic systems and nitrosyl cation. Doklady
BAN 16 no. 8: 825-828 '63.

1. Submitted by Corresponding Member B. Kourtev [Kurtev, B.]

FRANZ, Ferdinand

"Chemical and electrochemical surface treatment of materials" by
F. Trojanek. Reviewed by Ferdinand Franz. Chem prum 14 no.12:674
D '64.

1. Higher School of Chemical Technology, Prague.

L 59600-65 RPF(c)/EWA(d)/ENP(t)/ENP(z)/ENP(b) JD/WB

ACCESSION NR: AP5020424

CZ/0034/64/000/008/0562/0566

AUTHOR: Franz, Ferdinand (Engineer, Doctor, Candidate of sciences); Stefec, Rudolf (Engineer); Prazak, Milan (Engineer, Candidate of sciences)

TITLE: Use of the polarograph for the recording of a potentiodynamic curves

SOURCE: Hutnicke listy, no. 8, 1964, 562-566

TOPIC TAGS: metal corrosion, polarography, potentiometer, nickel, stainless steel, ferritic steel, pearlitic steel, austenitic steel.

ABSTRACT: The potentiostat is used to study corrosion of metals, and is rather expensive. Classical potentiostats are simpler and cheaper, and the authors describe their use in the study of metal corrosion. The authors used a polarograph for the corrosion studies, and discuss the necessary modifications of the instrument when used for this purpose; the polarograph thus became a classical potentiostat. Results obtained with instrument in studies on stainless ferritic pearlitic, austenitic steels, and nickel, are described. Orig. art. has 11 figures, 1 table, 1 formulae.

Card 1/2^b

L 59608-65

ACCESSION NR: AP5020424

2

ASSOCIATION: Katedra chemické technologie kovů VSCMT, Prague (Department of Chemical Technology of Metals VSCMT); Státní výzkumný ústav ochrany materiálů G. V. Akimova, Prague (State Research Institut for the Protection of Materials)

SUBMITTED: 00

ENCL: 00

SUB CODE: FM, EC

NR REF SOV: 000

OTHER: 017

JPRS

Card 2/2

HULUBEI, H., acad.; MARTALOGU, N.; IVASCU, M.; BESLIU, C.; BERINDE, A.;
NEAMU, I.; FRANZ, I.

Angular distribution of the protons of 6.2 MeV, elastically and
nonelastically diffused on S^{32} . Studii cerc fiz 11 no.4:1023-1031
'60. (KEAI 10:8)

1. Institutul de fizica atomica, Bucuresti. 2.Comitetul de redactie,
Studii si cercetari de fizica, redactor responsabil(for Hulubei).
(Angular momentum(Nuclear physics)) (Protons)
(Nuclear emulsions) (Sulfur) (Radioisotopes)

38850

8/056/62/042/006/001/047
B104/B102

24 6610

AUTHORS: Hulubei, H., Neamu, I., Franz, I., Martalogu, N., Scînteî, N.,
Ivascu, M., Berinde, A.

TITLE: Scattering of low energy proton from S^{32}

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42,
no. 6, 1962, 1433 - 1437

TEXT: Experiments were carried out with the Y-120 (U-120) cyclotron of the
Institute of Atomic Physics in Bucharest. Protons of 5.70, 5.85, 6.02,
6.20 and 6.34 Mev with an energy spread of 150 kev were focused into a
scattering chamber with a tantalum tube. 4 diaphragmas in this tube
reduced the diameter of the incident particle beam to 4 mm. The vacuum
sputtered S^{32} target had a surface area of 4 cm^2 and a thickness of less
than 2 mg/cm^2 . The sensitivity of the angular distributions of inelastical-
ly scattered protons to the incident proton energy (Fig. 2) indicates the
formation of a compound nucleus. The asymmetry of the distribution curve
may be explained by direct interaction. The angular distribution curves of

Card 1/1 2

Scattering of low energy proton from S^{32}

S/056/62/042/006/001/047
B104/B102

elastically scattered protons show that the reaction mechanism via compound nucleus formation in elastic processes with $E_p \simeq 6.02 - 6.34$ Mev plays an increasingly important role. There are 4 figures.

ASSOCIATION: Institut atomnoy fiziki Akademii nauk Rumynskoy Narodnoy Respubliki Bukharest (Institute of Atomic Physics of the Academy of Sciences of the Rumanian People's Republic, Bucharest)

SUBMITTED: November 12, 1961

Card 2/0 2

FRANZ, J.

CZECH

The silage of lucerne and lucerne-hay mixtures without adding preservatives. F. Isajev, J. Franz, and J. Novák (Výzkumný ústav živočišné výroby ČSAV v Uhřetěvsi, Czech.). *Shorník Českoslov. Akad. Zool.* Vol. 27B, 601-16 (1954).—During ensiling without molasses the nutrient losses of semidried lucerne and lucerne-hay mixts. (I) can be decreased if the dry matter of I is 60-5%. The initial growth of lactic acid bacteria is much slower than the growth of molds which have much greater power to draw the juice from the plant cells. More air present during ensiling I also favors the growth of molds. To retard the growth of molds and increase the growth of lactic acid bacteria, addition of 0.5-1% of molasses is recommended. If there is a shortage of molasses to preserve fodder, an addition of 25% straw to green fresh fodder is recommended.

Jan Miska

CH
2

FRANZ, J.

TECHNOLOGY

Periodical: SVET MOTORU. Vol. 12, no. 16, Aug. 1958.

FRANZ, J. Physician about helmets. p. 507.

Monthly List of East European Accession (EEAI) LC, Vol. 8, no. 3
March 1959 Unclass.

HAIS, K.; FRANZ, J.

On the problem of metathione residues in milk after desinfestation. Cesk. hyg. 10 no.3:205-208 My '65.

1. Vyzkumny ustav veterinarniho lekarstvi, Brno.

CZECHOSLOVAKIA UDC 612.014.469(:547-118.5):616-633.563.13-074

MELICHAR, Bohuslav; FRANZ, Jaroslav; Biochemical Department, Research Institute of Veterinary Medicine (Biochemické Oddelení Vyzkumného Ústavu Veterinárního Lékarství), Brno - Modlanky.

"Determination of p-nitro-m-cresol in Urine After Exposure to Metathione."

Prague, Pracovní Lékarství, Vol 18, No 3, Apr 66, pp 112 - 115.

Abstract [Authors' English summary modified]: The authors developed a method for direct determination of p-nitro-m-cresol in urine; it is based on acid hydrolysis of urine, oxidation of pigments by H_2O_2 , and separation of p-nitro-m-cresol from the residual pigments by acetonitrile from 5N NaOH solution. Spectrophotometric determination is made in 1N NaOH solution at 400 nm after acetonitrile was distilled off. The accuracy at concentrations of $\frac{1}{2}$ ppm was $97.3 \pm 6.3\%$ and at 5 ppm $92.6 \pm 2.4\%$ of the added amount. As little as 1.5 micrograms of p-nitro-m-cresol in 10 ml of urine can be detected. The method is suitable for exposure tests for Metathione which significantly inhibits cholinesterase. 3 Figures, 16 Western, 7 Czech references. (Manuscript received 18 May 65).
1/1

FRANZ, M.; HUBNER, W.; DOLINSZKY, Tamas [translator]

Dose and dosimetry. Atom taj 2 no.3:75-84 '59.

1. "Atomtechnikai Tajekoztato" szerkesztoje es lektora.

SRB, Vaclav; FRANZ, Milan

Electrolytic production of MnO_2 . Sbor chem tech no.3, part 1:51-69
'59.

1. Katedra anorganické technologie, Vysoká škola chemicko-technologická,
Praha.

FRANZ, R.

"Ozone"

p. 4 (Ceskoslovensky Vojak) Vol. 6, no. 25, Dec. 1957
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

FRANZ, Stanislav

CZECHOSLOVAKIA/General Biology - Postembryonic Development.

B.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 94640

Author : Frank, Stanislav

Inst : Charles University

Title : Biology of Reproduction and Postembryonic Development of
Blicca byoerkna (Linne) 1758.

Orig Pub : Univ. carolina. Biol., 1956, 2, No 1, 13-38.

Abstract : The spawning cycle of Blicca bjoerkna was investigated in May-September 1954 in natural conditions and the early development of embryos in an aquarium. Air temperature fluctuated from plus 8° to plus 22°, atmospheric pressure from 730 to 748 mm. In a small landlocked lake near the Elbe River, spawning occurred at 20°. In the aquarium at 14-19° development to the moment of switching to external feeding continued 12 days. The first scales emerged

Card 1/2

- 24 -

FRANZ, S.

Organization of maternal and child welfare department at the
Masaryk Health Center in Prague. Prakt. lek., Praha 31 nos.
13-14:301-303 5 July 1951 (CIML 21:1)

1. Of the Obstetric-Gynecological Department (Head -- S. Franz,
M.D.) of Masaryk Health Center in Prague-Krc.

FRANZ, Stanislav, MUDr

~~SECRET~~
Treatment of female genital tuberculosis with streptomycin and para-aminosalicylic acid. Cas.lek.cesk. 91 no.40:1144-1148 3 Oct 52.

1. Primar Ustavu materstvi v SOLOU v Praze-Krci.

(STREPTOMYCIN, therapeutic use,

tuberc., female genital, with PAS)

(PARAAMINOSALICYLIC ACID, therapeutic use,

tuberc., female genital, with streptomycin)

(TUBERCULOSIS, FEMALE GENITAL, therapy,

PAS & streptomycin)

FRANC, S.

"Infectious hepatitis during pregnancy." p. 367. (CASE IS LEFANTO SLOVYCH, Vol. 92, no. 14, Apr. 1953, Praha.)

SO: Monthly List of East European Accessions, Vol. 2, # 10 Library of Congress
October 1953, Uncl.

ENCL. 21.

Gynec. porod. Ustavu materst. stat. lec.oset. ustavu Praze Krci.
*Infekcni hepatitis v tehotenstvi. Infectious hepatitis in pregnancy
CAS. LEK. CES. 1953, 92/14 (367-374) Tables 1

Functional insufficiency of the liver is often ascribed to pregnancy, but, as the pathological postmortem findings in pregnant women do not support this. It is thought that the liver insufficiency is actually due to infectious hepatitis. Among 33 women with icterus in the course of pregnancy, and the pregnancy was not adversely influenced thereby. In 17 women with infectious hepatitis during pregnancy, the pregnancy ran a normal course to a normal delivery. 11 women developed infectious hepatitis during labour with one death, in which, however, sepsis could not be completely eliminated. Transmission of the infection to the child was not observed.

Prochazka - Prague (XX, 6,7, 10)

SO: JAGOSRPA MEDICA, Vol. 8, No. 5, Section VI, May 1954

*Gynecologic-Obstetric Dept., Inst. of Mother and Child and of the State
Therapeutic Inst., Prague, Krc.*

FRANZ, Stanislav; HODER, Josef; IPSER, Josef; MATENA, Vladimir; POCH, Robert

Medical apparatus and appliance. Cas. lek. cesk. 97 no.23-24:759-761
6 June 58.

1. Gyn. por. odd. Thomayerovy nemocnice v Praze-Krci, prednosta prim.
dr. S. Franz, I. chir. klinika KU, prednosta akademik A. Jirasek,
Vyzkumny ustav balneologicky, reditel prof. dr. K. Prerovsky, Vyzkumny
ustav stomatologicky, reditel doc. dr. J. Kostlan, internu klinika hyg.
fakulty, prednosta prof. dr. V. Jonas. St. F., Praha 12, Srobarova 23.

(APPARATUS,

prod. in Czech. (Cz))

FRANZ, Zdzislaw; HILLER, Jan; STACHURA, Aleksander

Primary staphylococcal pneumonia in adults. Pol. tyg. lek. 19 no.16:
601-603 13 Ap '64.

1. Z Oddziału Chorob Wewnętrznych Szpitala Miejskiego nr 2 w Mysłowicach (ordynator: dr. med. Z. Franz).

KOKOT, Franciszek; FRANZ, Zdzisław, dr. med.; ALEXSANDROWICZ, Jerzy

A case of chyluria. Pol. tyg. lek. 19 no.50:1936-1937 14 D '64.

1. Z III Kliniki Chorob Wewnętrznych Śląskiej Akademii Medycznej w Katowicach (Kierownik: prof. dr. med. K. Gibinski) i ze Szpitala Miejskiego nr. 2 w Mysłowicach (Ordynator: dr. med. Z. Franz).

ERANZ, Zenon, mgr inż.

Designing of spherical pressure containers. Inz i bud 19
no.10:403-407 0 '62.

1. Biuro Studiow i Projektow Konstrukcji Stalowych Mostostal,
Warszawa.

FRANZ, Zdzislaw

Case of cor bovinum with extensive dilation of the auricles.
Polski tygod. lek. 11 no.23:1034-1037 4 June 56.

1. Z Oddzialu Chorob Wewnetrznych Szpitala Miejskiego Nr 2 w
Myslowicach: dyrektor: dr. med. Tadeusz Boczon, Myslowice, 9
Maja 1.

(CARDIAC ENLARGMENT, case reports,
cor bovinum with auric. dilat. (Pol))

FRANZE, W.

TECHNOLOGY

PERIODICAL: ^{..} POR ES CIPOTECHNIKA. Vol. 8, no. 5, Oct. 1958

Franze, W. Introduction of the greatest economic publishing house of the German Democratic Republic in Hungary. p. 1hh.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2,
February 1959, Unclass.

PETROVSKY, D.; ~~FRANZEN, F.~~

Specific therapy of typhus abdominalis. Lek. listy, Brno 6 no.23:729-
733 1 Dec 51. (CIML 21:4)

1. Of the Infectious Department of Zlate Moravce State Hospital.

FRANZENAU, A.

New and interesting Foraminifera species. In English. p.211.
(Magyar Nemzeti Múzeum Természettudományi Múzeum Évkönyve, Vol. 7, 1956,
Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 9, Sept. 1957. Uncl.

FRANZHOLI, N.M.

Effectiveness of eryside in treating cardiovascular insufficiency
in children. Ped., akush. i gln. 23 no.4:27-28 '61. (MIRA 17:1)

1. L'vovskiy nauchno-issledovatel'skiy institut Ukrainskogo nauchno-
issledovatel'skogo instituta okhrany materinstva i detstva im. Ge-
roya Sovetskogo Soyuza prof.P.M.Buyka (nauchnyy rukovoditel' -
dotsent I.M.Rudnev [Rudniev, I.M.]).

LIVSHITS, TS.A. [Livshyts, TS.A.], kand.med.nauk; ZEMTSOVA, N.O. ; FRANZHOLI, N.N.; SHVABOVSKIY, V.A. [Shvabovs'kiy, V.A.]

Intraosseous drip infusion of saline solutions for infants. Ped.,
akush. i gin. 19 no.3:28-29 '57. (MIRA 13:1)

1. L'vovskiy nauchno-issledovatel'skiy institut okhrany materinstva
i detstva (direktor - I.D. Yashchuk) na baze Oblastnoy klinicheskoy
bol'nitsy (glavnyy vrach - I.A. Karagodin).
(INJECTIONS, SALINE)

GDR / Chemical Technology. Chemical Products and Their Application. Fats and Oils. Waxes. Soaps and Detergents. Flotation Agents.

H

Abs Jour: Ref Zhur-Khimiya, No 9, 1959, 32960.

Author : Iwainsky, H., Franzko, Cl.

Inst : Not givon.

Inst : Not given.
Title : Antioxidant Action of the Hydrazido of Isonicotinic Acid.

Orig Pub: Nahrung, 1958, 2, No 1, 53-60.

Abstract: There has been studied the antioxidant action (AA) of the hydrazides of isonicotinic acid (I - hydrazidos), isonicotinic acid and N-isonicotinyl-N'-acetyl-hydrazine, introduced into margarine during stirring at a concentration of 0.1-0.61%. Margarine specimens were kept at 25° in diffuse daylight; at definite time intervals, their perox-

Card 1/2

FRANZL, M.

Measuring the capacitance of high-tension installations.
p. 147. ELEKTROTECHNIK. (M inisterstvo strojirenstvi)
Praha.
Vol 11, no. 5, May 1956.

SOURCES: EEAL - LC Vol. 5, No. 10 OCT. 1956

1. KAPITOL, 1. KAPITOL

PHASE I BOOK EXPLOITATION SOV/4409

Československá akademie věd. Sekce technická

Práce ústavu pro elektrotechniku ČSAV z r. 1958, IX (Proceedings of the Institute for Electrical Engineering of the ČSAV (Czechoslovak Academy of Sciences) for 1958, No. 9) Prague, 1959. 193 p. 700 copies printed.

Scientific Ed.: Miloslav Tayerle, Engineer, Doctor; Ed. of this issue: Marie Moravcová; Tech. Ed.: František Končický.

PURPOSE: This collection of articles is intended for specialists in the field of high-voltage technique.

COVERAGE: The collection contains 9 original papers devoted to high-voltage technique and to special problems of heavy-current engineering. The papers deal with the so-called supercorona effect which has an important influence on the dimensioning of the sparking distance for very high voltages at commercial frequency, and with the effects of periodic forces of short circuits on transformer windings. Also discussed are impedance models containing active components, the measurements of electric quantities using a-c model technique,

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Proceedings of the Institute (Cont.)

SOV/4409

the effect of eddy currents in d-c motors fed from rectifiers, as well as the contemporary state and comparative study of the theory of purely dielectric breakdown of solids and experimental investigations of impact properties of instrument transformers with layer windings. No personalities are mentioned. References accompany each paper.

TABLE OF CONTENTS:

- I. Veverka, Antonín, and Vladimír Kreisinger. Spark-over Between Wire and Sphere 9
There are 5 references: 1 French and 4 German.
- II. Kulda, Jiří. Effect of Periodic Short-Circuit Force on Transformer Winding 30
There are 2 references: 1 Czech and 1 German.
- III. Franzl, Milan. Single-Phase Lasting Short Circuit
Between Two Transformers 43

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Proceedings of the Institute (Cont.)

SOV/4409

There are 2 references: 1 Czech and 1 German.

- IV. Čemus, Jiří. Feasibility of Impedance Models With Active Components 66

There are 6 references: 3 Czech and 3 German.

- V. Čemus, Jiří. Admittance Models 75

There are 5 references: 4 Czech and 1 German.

- VI. Hladík, Jiří. Measurement of Electric Quantities in the Technique of A-C Models 87

There are 29 references: 11 Czech, 13 English, 1 French, and 4 German.

- VII. Štěpina, Jaroslav, and Jiří Bendl. Effect of Eddy Currents on D-C Motors Fed From Rectifiers 123

There are 13 references: 5 Czech and 8 German.

- VIII. Batka, Vilém. Present State of the Theory of Pure Electric Breakdown of Solids 159

Card 3/4

Proceedings of the Institute (Cont.)

SOV/4409

There are 26 references: 1 Czech, 8 Soviet, 14 English, and
3 German.

AVAILABLE: Library of Congress

Card 4/4

JP/rsm/ec
12-1-60

FRANCL, Milan, inz.

Losses in the winding of large turboalternators. El tech obzor
53 no.8:435-439 fig 1ca.

1. Institute of Electrical Engineering, Czechoslovak Academy of
Sciences.

| 1ST AND 2ND ORDERS | | | | | | | | | | | | | | | | | | | | | | | | | | 1ST AND 4TH ORDERS | | | | | | | | | | | | | | | | | | | | | | | | | |
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| PROCESSES AND PROPERTIES INDEX | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>FRANZOSA, R.</p> <p>MACYAR TEXTILTECHNIKA HUNGARIAN TEXTILES Vol. IV. - 1951 No. 1. Jan.</p> <p>R. Franzosa The utilization of bentonite in the textile printing trade 26 - 28</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>ASSOCIATE DETAILORIAL LITERATURE CLASSIFICATION</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SECTION ONE | | | | | | | | | | | | | | | | | | | | | | | | | | SECTION TWO | | | | | | | | | | | | | | | | | | | | | | | | | |
| SECTION ONE | | | | | | | | | | | | | | | | | | | | | | | | | | SECTION TWO | | | | | | | | | | | | | | | | | | | | | | | | | |

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| <p>FRANZOSA, R.</p> <p>MAGYAR TEXTILTECHNIKA HUNGARIAN TEXTILES VOL. IV -1951 No. 2, Feb.</p> <p><i>R. Franzosa</i> Extending the possibilities for the utilization of naphthol dyes in textile printing</p> <p>01 02</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p> | | | | | | | | | | | | | | | | | | | | | | | | | |

FRANZUS, G. A., and MAKAREVSKIY, A. I.

Forces Acting upon the Aircraft in Flight and in Landing, BNT, 1943.

FRAS
YUGOSLAVIA / Microbiology. Medical and Veterinary Microbiology. F-5

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 22055

Author : Fras

Inst :

Title : Dissociation of Anthrax Vaccine Strain 34F₂ (Sterne).

Orig Pub: Veterin. arh., 1956, 26, No. 1-2, 21-28

Abstract: The phenomenon of dissociation in the vaccine strain 34F₂ (Sterne) was studied. The produced strain of this vaccine was planted on neutral agar and incubated in a thermostat in a normal atmosphere and in the presence of 10% CO₂. After 24 hours normal R-shaped colonies developed on the medium. However, after 48 hours compact and light colonies appeared, which developed from, or on the borders of, the old colony. The new colonies had a smooth shiny surface. They could be transferred on agar. Upon incubation with CO₂, shiny smooth colonies were obtained with a raised center and uneven edges. They were designated S₁-form. From the colonies grown in a

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YUGOSLAVIA / Microbiology. Medical and Veterinary Microbiology. F-5

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 22055

Author : Fras

normal atmosphere were also obtained semitransparent, shiny, round, raised, small colonies, designated as S₂-form. Among these 5% had rough edges. Also typical RS colonies with uneven edges, smooth and convex center of a milky-green color were obtained. S- and RS-forms are not pathogenic to mice and not immunogenic. S-variant lost ability to form spores, S₂ and RS lost this ability to a considerable degree (produce spores up to 20%), while the R-form is pathogenic to mice, immunogenic and forms spores up to 80-90%. Differences in dissociated colonies were observed by other indices. Therefore, for mass vaccine production, it is necessary to select fresh strains, which have not yet begun to dissociate.

Card : 2/2

-51-

FRAS, A.

"The Excretion of Tubercle Bacilli into the Milk of Cows which have reacted to the Tuberculin Test". Dr. Antun Fras - ass. Dr. Bozidar Tunki - scientific collaborator of Inst. for Vet. & Med. Researches in Zagreb.

SOURCE: Vet. SVEZAK 2, p. 329, 1953

MIHALJEVIC, F.; FALISEVAC, J.; BEZJAK, B.; BEZJAK, V.; CVJETANOVIC, B.
FRAS, I.

Tularemia in Croatia. Higijena, Beogr. 6 no.2:129-150 1954.

1. Bolnica za zarazne bolesti; Zavod za mikrobiologiju Medicinskog fakulteta, Skola narodnog zdravlja, Institut za veterinarskomedicinska istrazivanja, Zagreb.

(TULAREMIA, epidemiol.
Yugosl.)

FRASHERI, Muharrem

Albania/Chemical Technology - Chemical Products and Their Application. Food Industry,
I-28

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63644

Author: Rush, Islam; Frasherⁱ, Muharrem

Institution: None

Title: Significance of Enzymes and pH in Bread Baking from Wheat Flour

Original

Periodical: Rendesija e matjeve te pH ne prodhimin e bukes me grure te mbire,
Teknika, 1954, 1, No 2, 23-24; Albanian

Abstract: None

Card 1/1

ALBANIA/Chemical Technology. Chemical Products and H
Their Uses. Part III. Food Industry.

Abs Jour : Ref Zhur-Khimiya, No 15, 1958, 51973

Author : Frasheri, Muharem; Binbashi, Hilmi

Inst : -

Title : Tobacco Leaf Waste Products and Their Util-
lization.

Orig Pub : Bul. shkenc. natur., 1956, No 3, 120-135

Abstract : No abstract.

Card : 1/1

KRETOVICH, V.L., BUNDEL', A.A., FRASHERI, M.R., BOROVIKOVA, N.V.

Competitive inhibition of transamination in plants by hydroxylamine.
Zhur.ob. biol. 19 no.5:414-416 S-O '58 (MIRA 11:10)

1. Institut biokhimii imeni A.N. Bakha AN SSSR.
(PLANTS, EFFECT OF HYDROXYLAMINE ON)
(GLUTAMIC ACID)
(SERINE)

17(3)

AUTHORS:

Kretovich, V. L., Bundel', A. A.,
Fraseri, M. R., Borovikova, N. V.

SOV/20-122-6-30/49

TITLE:

On the Participation of Hydroxylamine in the Synthesis of
Amino Acids in Plants (Ob uchastii gidroksilamina v sinteze
aminokislot v rasteniyakh)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 6, pp 1065 -
1067 (USSR)

ABSTRACT:

Already in 1884 (Ref 2) and in 1937 (Ref 1), respectively,
the opinion was expressed that plants during the assimilation
of nitrates form hydroxylamine which in consequence of a
later reaction with carbonyl compounds forms oximes. Accord-
ing to this hypothesis oximes are changed by reduction into
corresponding amino acids. Thus hydroxylamine together with
ammonia, which in theoretical constructions is used as an
inorganic initial compound in the synthesis of amino acids,
have become important substances. In spite of previous
papers dealing with the subject (Refs 3 - 7) the actual
participation of hydroxylamine in the synthesis of amino
acid by plants has never been demonstrated by experiment.
It was even ascertained that hydroxylamine as an intense

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On the Participation of Hydroxylamine in the
Synthesis of Amino Acids in Plants

SOV/20-122-6-30/49

intercellular toxin (kletochnyy yad) delays several processes, especially the reaction of the fermentative transamination (Ref 8). It is quite obvious that the problem of the participation of hydroxylamine investigated has to be discussed mainly with respect to the concentrations applied. The present paper aimed at investigating the participation of hydroxylamine in the synthesis of amino acid in the pulp and extracts of plant tissues. Small leaves of 10 - 12 days old wheat-seedlings and of 20 - 24 days old pumpkin-seedlings were used for this purpose. Table 1 shows the results of the experiments for the explanation of the influence exercised by hydroxylamine upon the synthesis of serine and glutaminic acid in the pumpkin-seedlings. It can be seen from table 1 that in the pulp of small leaves in the presence of hydroxylamine an intense synthesis of the serine and a distinctly marked synthesis of the glutaminic acid take place. In the pulp of wheat-seedlings the synthesis of both amino acids in question could be ascertained. However, the increase in the content of these acids in wheat and in pumpkin was different. It is difficult to explain the cause of this difference.

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On the Participation of Hydroxylamine in the
Synthesis of Amino Acids in Plants

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Finally, assumptions on the mechanism of the syntheses
discussed are expressed. There are 1 table and 14 references,
4 of which are Soviet.

ASSOCIATION: Institut biokhimii im. A. N. Bakha Akademii nauk SSSR
(Institute of Biochemistry imeni A. N. Bakh of the Academy of
Sciences, USSR)

PRESENTED: July 1, 1958, by A. I. Oparin, Academician

SUBMITTED: June 30, 1958

Card 3/3